Claims

1.   A method of filing a received e-mail message, the method comprising:

        reading a self-describing text-based data structure within the text body of the

5   received e-mail message;

        comparing the self-describing data structure to a plurality of pre-stored text-

based data structures; and

        storing the received data content of the e-mail message or a significant part

thereof in a selected data folder to which the received text-based data structure

10   corresponds,

        the method requiring no external access to data to carry out the reading,

comparing and storing steps.

2.   A method according to Claim 1, further comprising: .

15   creating a new data folder if the received text-based data structure does not

correspond to any of the plurality of pre-stored text-based data structures; and

        the storing step comprises storing the received e-mail message or a significant

part thereof in the new data folder.

20   3.   A method according to Claim 2, further comprising:

        adding the received text-based structure to the plurality of pre-stored text-

based data structures; and

        associating the received text-based structure with the new folder.

25   4.   A method according to any preceding claim, wherein the received text-based

data structure comprises a plurality of data sets, and the storing step comprises:

        storing each of the different data sets as a record that can be separately

manipulated in the selected folder.

30   5.   A method according to any preceding claim, wherein the received text-based

structure causes an interaction to occur with previously received or existing data.

6.   A method according to Claim 5, wherein the storing step comprises overwriting a data set of a text-based data structure previously stored within the folder with a data set of the received text-based data structure.

5   7.   A method according to Claim 5 or 6, wherein the received e-mail specifies matching data and certain fields of the data structure, and the interaction comprises:
       comparing the matching data for the certain fields of a previously stored data set; and
       interacting with the data set where the data stored in the certain fields matches
10   the matching data.

8.   A method according to Claim 7, wherein the interacting step comprises updating the data set where the data stored in the certain fields matches the matching data.

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9.   A method according to Claim 8, wherein the updating step comprises deleting the data set.

10.   A method according to Claim 9, wherein the updating step further comprises
20   inserting the data set provided in the received e-mail in place of the deleted data set.

11.   A method according to any of Claims 5 to 10, wherein the storing step comprises overwriting a text-based data structure previously stored within the folder with the received text-based data structure.

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12.   A method according to any preceding claim, further comprising:
       using the self-describing data structure to create a new definition for folder;
and
       applying that new definition to a new folder or existing folder.

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13.   A method according to Claim 12, further comprising updating a definition of an existing data folder with the new folder definition if the received text-based data structure does not correspond to any of the plurality of pre-stored text-based data structures and an identifier of the data structure matches that of the existing folder.

14.   A method according to any preceding claim, wherein the storing step comprises storing the received data in a database and the method further comprises using database data handling techniques to manipulate at least part of the stored data.

15.   A method according to any of preceding claim, further comprising sorting contents of the selected folder according to a user-selected characteristic.

16.   A method according to any preceding claim, further comprising writing the text-based data structure to a database file external to an e-mail function by which the data structure was received.

17.   A method according to Claim 16, wherein the data structure comprises a processing command for controlling an application which has access to the external database file.

18.   A method according to any of Claims 1 to 15, wherein the data structure comprises a processing command for controlling any aspect of the method.

19.   A method according to any preceding claim, wherein at least a portion of the text-based data structure is encoded and the method further comprises decoding the portion of the received text-based data structure before the comparing step.

20.   A method according to Claim 19, wherein the received e-mail message contains an encrypted licence from a sender authenticating the sender.

21.   A method according to Claim 20, wherein the encrypted licence comprises the self-describing text-based data structure.

22.   A method according to any preceding claim, further comprising comparing a current date with the date of receipt of a previously filed e-mail, and removing the previously filed e-mail if time between the dates exceeds a predetermined amount.

23.   A method according to Claim 22, wherein the received e-mail message comprises an expiry time and the removing step comprises removing the previously filed e-mail if the expiry time has lapsed.

5   24.   A method according to Claim 22 or 23, wherein received e-mail comprises a deletion instruction and the comparing and removal steps are carried out on reading of the deletion instruction.

25.   A method according to any preceding claim, wherein the text-based data
10   structure comprises a data structure written in a command language such as XML.

26.   A method according to Claim 25, wherein the text-based data structure comprises an XML schema and the e-mail message further comprises data conforming to the XML schema.

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27.   An apparatus for filing a newly received e-mail message, the apparatus comprising:

       a store of text-based data structures, each text-based structure corresponding to a particular e-mail folder;
20   reading means for reading a self-describing text-based data structure within the text body of the newly received e-mail message;

       a comparator for comparing the received self-describing data structure to each of the plurality of pre-stored text-based data structures; and

       filing means for filing the received e-mail message in a selected folder to
25   which the received text-based data structure corresponds,

       wherein the operation of the apparatus in filing a newly received e-mail requires no external access to data.

28.   An apparatus according to Claim 27, wherein the reading means, the
30   comparator and the filing means comprise an e-mail management application and a plug-in.

29.   A method of a recipient processing a received e-mail to cause data interaction; the method comprising:

reading a text-based data structure within the text body of the received e-mail message;

identifying some pre-stored data of the recipient by use of the data structure; and

5   causing an interaction to occur with the pre-stored data, the interaction being determined by the contents of the received e-mail.

30.   A method according to Claim 29, wherein the interaction is determined by the text-based structure.

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31.   A method according to Claim 29 or 30, wherein the e-mail comprises a data payload conforming to the data structure and the causing step comprises an interaction between the pre-stored data and the received data payload.

15   32.   A method according to Claim 31, wherein the interaction comprises overwriting the prestored data with the payload data.

33.   A method according to any of Claims 29 to 32, wherein the interaction comprises deleting the pre-stored data.

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34.   An apparatus for processing a received e-mail to cause data interaction; the apparatus comprising:

reading means for reading a text-based data structure within the text body of the received e-mail message;

25   identifying means for identifying some pre-stored data of the recipient by use of the data structure; and

interaction means for causing an interaction to occur with the pre-stored data, the interaction means being arranged to be controlled by the contents of the received e-mail.

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35.   A method of updating a remote data structure or process, the method comprising:

reading a text-based processing instruction within the text body of a received e-mail message;

accessing pre-stored data relating to the remote data structure or process;

updating the pre-stored data in accordance with the text-based processing instruction to effect control.

36.   A method according to Claim 35, wherein the updating step comprises updating a sender-defined database on a recipient's computer.

37.   A method according to Claim 35, wherein the updating step comprises updating a functional capability of a recipient's program;

38.   A method according to Claim 35, wherein the updating step comprises updating the executable code of a program provided at the recipient.

39.   A method according to Claim 35, wherein the updating step comprises issuing commands to a program provided at the recipient.

40.   A method according to Claim 35, wherein the updating step comprises issuing commands indirectly to other programs.

41.   A system for updating a remote data structure or process, the system comprising:

reading means for reading a text-based processing instruction within the text body of a received e-mail message;

accessing means for accessing pre-stored data relating to the remote data structure or process; and

updating means for updating the pre-stored data in accordance with the text-based processing instruction to effect control.

42.   A method of filing content of a received instant messaging communication, the method comprising:

reading a self-describing text-based data structure within the text body of the received instant messaging communication;

comparing the self-describing data structure to a plurality of pre-stored text-based data structures; and

storing the received data content of the instant messaging communication or a significant part thereof in a selected data folder to which the received text-based data structure corresponds,

the method requiring no external access to data to carry out the reading,

5   comparing and storing steps.

43.   A method of updating a remote data structure or process, the method comprising:

reading a text-based processing instruction within the text body of a received

10   instant messaging communication;

accessing pre-stored data relating to the remote data structure or process; and

updating the pre-stored data in accordance with the text-based processing instruction to effect control.

15   44.   A method of a recipient processing a received instant messaging communication to cause data interaction; the method comprising:

reading a text-based data structure within the text body of the received instant messaging communication;

identifying some pre-stored data of the recipient by use of the data structure;

20   and

causing an interaction to occur with the pre-stored data, the interaction being determined by the contents of the received instant messaging communication.

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